In the Claims:

1. (Currently Amended) ~~The broad~~ A method of providing respiratory therapy ~~wherein the~~ to a care recipient, ~~recipient's breathing cycle is consciously synchronized with their heart rate variability cycle during the application of therapeutic gas~~ the method comprising:

monitoring a heartbeat rate of the care recipient to determine a heart rate variability cycle of the care recipient, wherein the heart rate variability cycle includes periods of increasing and decreasing heartbeat rate;

providing an indicator to the care recipient indicative of the periods of increasing and decreasing heartbeat rate;

instructing the care recipient to synchronize inhalation and exhalation phases of a breathing cycle of the care recipient with the periods of increasing and decreasing heartbeat rate, respectively; and

dispensing a therapeutic gas to the care recipient during the inhalation phase of the breathing cycle.

2-10. (Cancelled)

11. (Currently Amended) The ~~instructive~~ method of claim 1 wherein monitoring ~~employing heart~~ the heartbeat rate ~~variability monitoring~~ further comprises receiving a signal from a heartbeat detector to determine the heart rate variability cycle.

12. (Cancelled)

13. (Currently Amended) The method of claim 1 wherein coherence of the heart rate variability cycle occurs when the inhalation ~~is facilitated during~~ and exhalation phases of the breathing cycle are synchronized with the periods of increasing and decreasing heartbeat ~~and exhalation is facilitated during decreasing heartbeat~~ rate.

14-16. (Cancelled)

17. (New) The method of claim 1 wherein dispensing the therapeutic gas to the care recipient during the inhalation phase of the breathing cycle further comprises automatically controlling an electrically-controlled regulator and synchronizing control of the electrically-controlled regulator with the breathing cycle to begin opening the electrically-controlled regulator as the inhalation phase of the breathing cycle begins.

18. (New) The method of claim 17 wherein synchronizing control of the electrically-controlled regulator with the breathing cycle further comprises opening the electrically-controlled regulator to provide a peak therapeutic gas flow at mid-inhalation during the inhalation phase of the breathing cycle.

19. (New) The method of claim 18 wherein synchronizing control of the electrically-controlled regulator with the breathing cycle further comprises beginning to close the electrically-controlled regulator after mid-inhalation such that the electrically-controlled regulator is in a fully-closed position prior to when the exhalation phase of the breathing cycle begins.

20. (New) The method of claim 19 wherein synchronizing control of the electrically-controlled regulator with the breathing cycle further comprises maintaining the electrically-controlled regulator in the fully-closed position during the exhalation phase of the breathing cycle.

21. (New) The method of claim 1 further comprising providing an indicator to a care practitioner indicative of the dispensing of the therapeutic gas to the care recipient during the inhalation phase of the breathing cycle.

22. (New) The method of claim 21 wherein the indicator provided to the care practitioner further comprises a visual indicator.

23. (New) The method of claim 22 further comprising controlling the visual indicator such that the visual indicator varies in intensity and has a peak visual intensity when dispensing of the therapeutic gas is at a peak flow rate.

24. (New) The method of claim 1 wherein providing the indicator to the care recipient further comprises providing at least one of an audible, visual, and tactile indicator to the care recipient.

25. (New) A system usable to provide respiratory therapy to a care recipient, comprising:

an electrically-controlled regulator adapted to provide a therapeutic gas to the care recipient;

a care recipient indicator adapted to provide indications to the care recipient;

a heartbeat detector adapted to determine a heartbeat rate of the care recipient;

a heart rate variability monitor adapted to:

determine a heart rate variability cycle of the care recipient based upon the heartbeat rate of the care recipient, wherein the heart rate variability cycle includes periods of increasing and decreasing heartbeat rate;

control the care recipient indicator to provide the indications to the care recipient, wherein the indications are indicative of the periods of increasing and decreasing heartbeat rate to allow the care recipient to synchronize inhalation and exhalation phases of a breathing cycle of the care recipient with the periods of increasing and decreasing heartbeat rate, respectively; and

control the electrically-controlled regulator to dispense the therapeutic gas to the care recipient during the inhalation phase of the breathing cycle.

26. (New) The system of claim 25 wherein, in being adapted to determine the heart rate variability cycle based upon the heartbeat rate of the care recipient, the heart rate variability monitor is further adapted to receive a signal from the heartbeat detector indicative of the heartbeat rate of the care recipient.

27. (New) The system of claim 25 wherein, in being adapted to control the care recipient indicator to provide the indications to the care recipient to allow the care recipient to synchronize inhalation and exhalation phases of the breathing cycle with the periods of increasing and decreasing heartbeat rate, respectively, the heart rate variability monitor is further adapted to allow the care recipient to achieve coherence of the heart rate variability cycle when the inhalation and exhalation phases of the breathing cycle are synchronized with the periods of increasing and decreasing heartbeat rate.

28. (New) The system of claim 25 wherein, in being adapted to control the electrically-controlled regulator to dispense the therapeutic gas, the heart rate variability monitor is further adapted to synchronize control of the electrically-controlled regulator with the breathing cycle to begin opening the electrically-controlled regulator as the inhalation phase of the breathing cycle begins.

29. (New) The system of claim 28 wherein, in being adapted to synchronize control of the electrically-controlled regulator with the breathing cycle, the heart rate variability monitor is further adapted to control the electrically-controlled regulator to open the electrically-controlled regulator to provide a peak therapeutic gas flow at mid-inhalation during the inhalation phase of the breathing cycle.

30. (New) The system of claim 29 wherein, in being adapted to synchronize control of the electrically-controlled regulator with the breathing cycle, the heart rate variability monitor is further adapted to control the electrically-controlled regulator to begin to close the electrically-controlled regulator after mid-inhalation such that the electrically-controlled regulator is in a fully-closed position prior to when the exhalation phase of the breathing cycle begins.

31. (New) The system of claim 30 wherein, in being adapted to synchronize control of the electrically-controlled regulator with the breathing cycle, the heart rate variability monitor is further adapted to control the electrically-controlled regulator to maintain the electrically-controlled regulator in the fully-closed position during the exhalation phase of the breathing cycle.

32. (New) The system of claim 25 further comprising a care practitioner indicator adapted to provide indications to a care practitioner, wherein the heart rate variability monitor is further adapted to control the care practitioner indicator to provide the indications to the care practitioner indicative of the dispensing of the therapeutic gas to the care recipient during the inhalation phase of the breathing cycle.

33. (New) The system of claim 32 wherein the care practitioner indicator further comprises a visual indicator to allow the care practitioner to visually determine when the therapeutic gas is being dispensed.

34. (New) The system of claim 33 wherein the heart rate variability monitor is further adapted to control the visual indicator such that the visual indicator varies in intensity and has a peak visual intensity when dispensing of the therapeutic gas is at a peak flow rate.

35. (New) The system of claim 25 wherein the care recipient indicator further comprises at least one of an audible, visual, and tactile indicator to the care recipient.

36. (New) The system of claim 25 wherein the electrically-controlled regulator further comprises a reciprocating regulator and, in being adapted to control the reciprocating regulator to dispense therapeutic gas to the care recipient during the inhalation phase of the breathing cycle, the heart rate variability monitor is further adapted to control the reciprocating regulator in synchrony with the heart rate variability cycle of the care recipient.

37. (New) The system of claim 36 wherein the reciprocating regulator further comprises a reciprocating armature adapted to modulate flow of the therapeutic gas in response to the control of the heart rate variability monitor.

38. (New) The system of claim 37 wherein the reciprocating armature is further adapted to normally rest at a center point and to dispense a peak therapeutic gas flow when the reciprocating armature is at rest, and the heart rate variability monitor is further adapted to control the

reciprocating armature such that the reciprocating armature is at rest to provide the peak therapeutic gas flow at mid-inhalation during the inhalation phase of the breathing cycle.